

REMARKSRequest for Reconsideration

Applicant has carefully considered the matters raised by the Examiner in the outstanding Office Action but remains of the opinion that patentable subject matter is present. Applicant respectfully requests reconsideration of the Examiner's position based on the above amendments and the following remarks.

Claim Status

Claims 1-14 are pending in this Application.

Claim 1 has been amended herein to correct an obvious grammatical error.

Claim 8 has been amended herein to place it into independent format so as to incorporate all limitations from Claim 1. As will be brought out in more detail below, it is believed that this amendment, coupled with the statement made under 103 (c) herein, presents Claim 8 in allowable format.

New Claims, 11-14, find their support in the Specification as follows:

See page 46 for Claim 11, page 41 for Claims 12 and 13, and page 14, second full paragraph, for Claim 14.

The addition of Claims 11-14, as well as the amendments made herein, do not add any new subject matter.

Specification Objections

The Title had been objected to as not being descriptive. A new Title has been presented herein which is deemed to be descriptive.

The Abstract had been objected to as containing improper language. A revised Abstract is presented herein which is deemed to have proper language.

The disclosure had been objected to on pages 6 and 7. The third paragraph on page 6 has been amended herein and such amendments are deemed to rectify the objections made to the disclosure on pages 6 and 7 as contained in the Office Action. The amendments made to the third paragraph

on page 6 add no new matter, but simply rearrange the wording of this third paragraph.

The use of trademarks had been objected to in the Application because they had not been capitalized. Starting on page 38 and going over to page 41, the various paragraphs have been amended to capitalize all of the trademarks. Furthermore, some of these paragraphs have been amended to clarify that these are all dispersants. Respectfully, no new matter has been added by way of these amendments.

Prior Art

Claims 1, 2, 9 and 10 had been rejected as unpatentable over a combination of Wen, Chieng and Applicant's acknowledged prior art. Claims 3-7 had been rejected as being unpatentable over a combination of Wen, Chieng, and Nair. Finally, Claim 8 had been rejected as being unpatentable over a combination of Wen, Chieng, and Nakajima.

First, turning to the rejection of Claim 8, it will be noted that Nakajima is recited as being owned by Konica Corporation. The Assignee herein, Konica Minolta Holdings, Inc. is the successor to Konica Corporation. Furthermore, it will be noted that Nakajima is prior art under 102(e) only since Nakajima was filed on August 21, 2003 but Published March 18, 2004 while the present Application was filed January 12, 2004.

Thus, in accordance with 103(c)(1), Applicant states that the subject matter of Nakajima and the claimed invention in this Application were at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person. Respectfully, Nakajima is not prior art under 103. Based on the amendments made to Claim 8 to place Claim 8 into independent form, it is submitted that Claim 8 is now patentable over the combination of Chieng and Wen since Nakajima has been removed as prior art.

Turning now to the other references, each reference will be discussed in turn.

With respect to Wen, it will be noted that Wen does not teach the surface tension of the cured ink. The Examiner will note that the surface tension of the ink referred to in Claim 1 as well as Claim 8 as amended, refers to the absolute value of the difference between the surface tension of the recording medium and the surface tension of the cured ink. As noted by the Examiner, Wen fails to teach the surface tension of the ink.

Wen also fails to teach the use of a cationically polymerizable component in the ink. The fact that the claims refer to a cationically polymerizable component in the ink is important. As recited on page 10, in the second full paragraph, actinic radiation curable inks generally contain radically polymerizable components. A problem with these inks, however, is that, when they are exposed to actinic energy, the curing occurs from the inside. By using a cationically polymerizable type component, however, the surface is initially cured. By initially curing the surface, a smoother image is formed and the image will not degrade and result in non-uniform densities. The fact that the surface has been cured is measured by the surface tension of the ink droplet which is recited in the claims. The fact that the surface tension difference between the

ink and the recording medium must be close, is also recited in the first full paragraph on page 41 of the Application, wherein it teaches that, when the different surface tension exceeds 20 mN/m, the smoothness of the image is degraded and non-uniformity density occurs. Thus, it is important to use a cationically polymerizable component in the ink.

Wen does not teach such a cationically polymerizable component, nor does Wen teach nor suggest controlling the surface tension of the cured ink in relation to that of the substrate.

Turning to Chieng, Chieng does not solve either of the two defects that are present in Wen. The surface tension referred to in Chieng is that of the uncured ink, see Column 3, lines 50-51. There is no teaching in Chieng for the difference between the surface tension of the cured ink and that of the substrate.

Furthermore, Chieng does not teach a cationically polymerizable component in an ink. The two diluents, GAFGARD 233 and 3-BOND 3070 consist of an aliphatic urethane based oligomer and an ester based acrylic compound, respectively. These are not cationically

polymerizable components. As noted above, use of the cationically polymerizable component is an important factor in the ink of the present Invention.

Thus, it is respectfully submitted that the combination of Wen and Chieng either alone or in combination does not result in the present Invention since neither reference teach the use or a cationically polymerizable component in the ink nor the surface tension between the substrate and the cured ink.

Turning to Nair, Nair does not cure the defects in Wen or Chieng. For that matter, it is questionable as to why Nair is even combined with the references because Nair is not directed to an ink at all. Nair is directed to a coating composition or a film which is photocurable. Thus, it is respectfully submitted that Nair is not analogous art and should not in any way be combined with Wen or Chieng. Thus, Nair's composition is not an ink at all but, rather, a coating composition. In any event, Nair is not teaching an ink composition containing cationically polymerizable components. Thus, the combination of Wen, Chieng, and Nair does not teach nor suggest the present Invention.

Conclusion

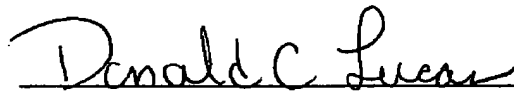
In view of the foregoing, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested.

Should any extensions of time or fees be necessary in order to maintain this Application in pending condition, appropriate requests are hereby made and authorization is given to debit account #02-2275.

Respectfully submitted,

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